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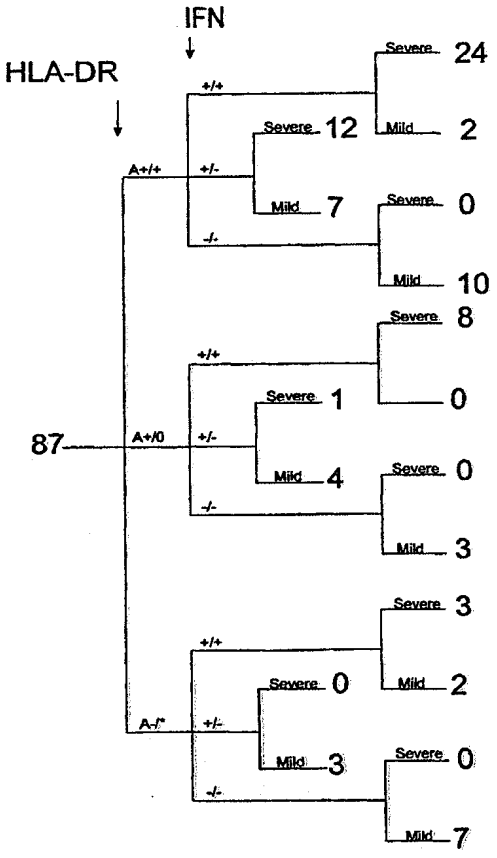
(54) Title: DIAGNOSTIC AND THERAPEUTIC METHODS IN AUTOIMMUNE DISEASE



(57) Abstract: In one aspect, the invention provides a method of diagnosis. The diagnostic method may include steps of identifying a patient at risk of an arthritis, the patient having an interferon gamma gene. The patient may be tested to characterize a polymorphism in a first intron of the interferon gamma gene. The polymorphism may comprise a variable length dinucleotide repeat region within the first intron, and the dinucleotide repeat region may be located at least partly between nucleotides 1349 and 1373 in the interferon, gamma gene. The method may be carried out so as to be capable of identifying alleles such as the 126 bp allele and the 122 bp allele, as further described herein. The polymorphisms may be distinguished based on a difference in the number of CA repeats in a portion of the first intron of the interferon gamma gene. The invention may also comprise testing a patient for a polymorphism is an HLA protein (or gene), such as the HLA-DRB1 protein.

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